

CLAIMS

We claim:

- 1 1. A method comprising the steps of:
 - 2 (A) pulling gas from a space into a gas filtering system comprising:
 - 3 (i) a plant growing device including:
 - 4 (1) a growth medium;
 - 5 (2) a plant growing in the medium;
 - 6 (ii) a subsurface member including:
 - 7 (1) a first gas inlet for pulling the gas into the member and
 - 8 through the medium; and
 - 9 (2) a first gas outlet for discharging the gas from the member;
 - 10 (iii) a fan unit including:
 - 11 (1) a second gas inlet in fluid communication with the first gas
 - 12 outlet; and
 - 13 (2) a second gas outlet for discharging the gas into the space;
 - 14 (B) filtering the gas of gas borne contaminants by contacting the gas with the
 - 15 growth medium containing the growing plant to form a filtered gas; and
 - 16 (C) exhausting the filtered gas back into the space.
 - 1 2. The method of claim 1, wherein the subsurface member further including:
 - 2 (3) an interior, a top and a bottom.

 - 1 3. The method of claim 2, wherein the gas inlet is disposed in the bottom of the
 - 2 member and the gas outlet is disposed in the top of the member.

1 4. The method of claim 3, wherein the bottom includes a plurality of gas inlets
2 disposed therein.

1 5. The method of claim 1, wherein the member is in the shape of a torus having a top
2 half, a bottom half, at least one gas outlet and a plurality of gas inlet inlets disposed in the
3 bottom half of the torus.

1 6. The method of claim 5, wherein the gas outlet is disposed in the top half of the
2 torus.

1 7. The method of claim 5, wherein the gas inlets are disposed in a symmetrical pattern
2 in the bottom half of the torus.

1 8. The method of claim 2, wherein the gas inlet is a continuous slit in the bottom half
2 of the torus.

1 9. A gas filtering system comprising:

2 (A) a plant growing device containing:

3 (i) a growth medium;

4 (ii) a plant growing in the medium;

5 (B) a subsurface member including:

6 (i) a first gas inlet for pulling the gas into member and through the

7 medium;

8 (ii) a first gas outlet for discharging the gas from the member;

9 (C) a fan unit including:

10 (i) a second gas inlet in fluid communication with the first gas outlet;

11 (ii) a second gas outlet for discharging the gas into the space; and

12 (iii) a fan for drawing gas from second gas inlet and exhausting gas out

13 the second gas outlet.

1 10. The system of claim 9, the system further comprising:

2 (D) an electronic unit including:

3 (i) a circuit board;

4 (ii) an on/off switch;

5 (iii) indicator lights.

1 11. The system of claim 10, the system further comprising:

2 (E) a moisture sensor placed subsoil below the bottom of the subsurface

3 member.

1 12. The system of claim 9, wherein the subsurface member further including:

(iii) an interior, a top and a bottom.

1 13. The system of claim 12, wherein the gas inlet is disposed in the bottom of the
2 member and the gas outlet is disposed in the top of the member.

1 14. The system of claim 13, wherein the bottom includes a plurality of gas inlets
2 disposed therein.

15. The system of claim 9, wherein the member is in the shape of a torus having a top
half, a bottom half, at least one gas outlet and a plurality of gas inlet inlets disposed in the
bottom half of the torus.

16. The system of claim 15, wherein the gas outlet is disposed in the top half of the
torus.

17. The system of claim 15, wherein the gas inlets are disposed is a symmetrical pattern
2 in the bottom half of the torus.

1 18. The system of claim 12, wherein the gas inlet is a continuous slit in the bottom half
2 of the torus.

1 19. A gas filtering system comprising:

2 (A) a member to be placed below a growth medium surface including:

3 (i) a first gas inlet in fluid communication through the medium to a
4 space; and

5 (ii) a first gas outlet;

6 (B) a fan unit connected to the member including:

7 (i) a second gas inlet in fluid communication with the first gas outlet;

8 (ii) a second gas outlet in fluid communication with the space; and

9 (iii) a fan for drawing gas from the space through the medium into and out
10 of the member and into and out of the fan unit back into the space.

1 20. The system of claim 9, the system further comprising:

2 (D) an electronic unit including:

3 (i) a circuit board;

4 (ii) an on/off switch;

5 (iii) indicator lights; and

6 (E) a moisture sensor placed subsoil below the bottom of the subsurface
7 member.